## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claim 1 (canceled)

Claim 2 (currently amended): A method for stimulating root growth or for enhancing the formation of lateral or adventitious roots or for altering root geotropism, said method comprising expression of a nucleic acid molecule encoding a plant cytokinin oxidase selected from the group consisting of:

- a. an isolated nucleic acid molecule comprising a DNA sequence as set forth in SEQ ID NO: 26, or the complement thereof,
- b. an isolated nucleic acid molecule comprising the RNA sequence corresponding to SEQ ID NO:26, or the complement thereof,
- c. an isolated nucleic acid molecule specifically hybridizing to SEQ ID NO: 26, or to the complement thereof under medium stringency conditions such as 1-4X SSC/0.25 % w/v SDS at 45° C or higher for 2 -3 hours, with the proviso that an isolated nucleic acid molecule encoding a cytokinin oxidase from corn (maize) is not included.
- d. an isolated nucleic acid molecule encoding a protein comprising the amino acid sequence as set forth in SEQ ID NO: 4, or the complement thereof,
- e. an isolated nucleic acid molecule as defined in any of (a) to (d) characterized in that said nucleic acid molecule is DNA, genomic DNA, cDNA, synthetic DNA or RNA wherein T is replaced by U,
- f. an isolated nucleic acid molecule which is degenerated to a nucleic acid molecule as set forth in SEQ ID NO: 26, or which is degenerated to a

- nucleic acid molecule as defined in any of (a) to (e) as a result of the genetic code,
- g. an isolated nucleic acid molecule which is divergent from a nucleic acid molecule encoding a protein as set forth in SEQ ID NO: 4, or which is divergent from a nucleic acid molecule as defined in any of (a) to (e), due to differences in codon usage between organisms,
- h. an isolated nucleic acid molecule encoding a protein as set forth in SEQ ID NO: 4, or a nucleic acid molecule as defined in any of (a) to (e) which is divergent due to differences between alleles;
- i. an isolated nucleic acid molecule encoding a protein as set forth in SEQ ID NO: 4, and
- [[j]] <u>f.</u> <u>a</u> functional fragment[[s]] of an isolated nucleic acid molecule as defined in any of (a) to (i) (e) having the biological activity of a cytokinin oxidase.

Claim 3 (currently amended): An isolated nucleic acid molecule encoding a plant protein having cytokinin oxidase activity selected from the group consisting of:

- a. an isolated nucleic acid molecule comprising a DNA sequence as set forth in SEQ ID NO: 26 or the complement thereof,
- b. an isolated nucleic acid molecule comprising the RNA sequence corresponding to SEQ ID NO: 26, or the complement thereof,
- c. an isolated nucleic acid molecule specifically hybridizing to a nucleic acid molecule as set forth in SEQ ID NO: 26, or the complement thereof, under medium stringency conditions such as 1-4 X SSC/0.25 % w/v SDS at 45° C or higher for 2 -3 hours, with the proviso that an isolated nucleic acid molecule encoding a cytokin oxidase from corn (maize) is not included

d. a nucleic acid encoding a protein with an amino acid sequence comprising the polypeptide as given in SEQ ID NO: 32 and which is at least 70% similar to the amino acid sequence as given in SEQ ID NO: 4,

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- e. a nucleic acid molecule encoding a protein comprising the amino acid sequence as set forth in any of SEQ ID NO: 4,
- f. a nucleic acid molecule which is degenerated to a nucleic acid molecule as set forth in SEQ ID NO: 26, or which is degenerated to a nucleic acid molecule as defined in any of (a) to (e) as a result of the genetic code,
- g. a nucleic acid molecule which is divergent from a nucleic acid molecule encoding a protein as set forth in any of SEQ ID NO: 4, or which is divergent from a nucleic acid molecule as defined in any of (a) to (e) due to the differences in codon usage between organisms,
- h. a nucleic acid molecule encoding a protein as set forth in SEQ ID NO: 4, or a nucleic acid molecule as defined in (a) to (e) which is divergent due to differences between alleles,
- I e. an isolated nucleic acid molecule encoding an immunologically active fragment of a cytokinin oxidase encoded by a nucleic acid molecule as set forth in SEQ ID NO:26 or an immunologically active fragment of a nucleic acid as defined in any of (a) to (h) (c),
- (j)f. an isolated nucleic acid molecule encoding a functional fragment of a cytokinin oxidase encoded by a nucleic acid molecule as set forth in SEQ ID NO: 26, or a functional fragment of a nucleic acid molecule as defined in any of (a) to (h) (c), wherein said fragment has the biological activity of a cytokinin oxidase, and
- (k) g. a nucleic acid molecule encoding a protein as defined in SEQ ID NO: 4, or the complement thereof, provided that said nucleic acid molecule is not

the nucleic acid molecule as deposited under Genbank accession number: AC005917 (SEQ ID NO:37).

Claim 4 (previously presented): An isolated nucleic acid molecule according to claim 3 which is DNA, cDNA, genomic DNA or synthetic DNA, or RNA wherein T is replaced by U.

Claim 5 (withdrawn): A nucleic acid molecule of at least 15 nucleotides in length hybridizing specifically with a nucleic acid of claim 3 or 4.

Claim 6 (withdrawn): A nucleic acid molecule of at least 15 nucleotides in length specifically amplifying a nucleic acid of claim 3 or 4.

Claim 7 (previously presented): A vector comprising a nucleic acid molecule of claim 3 or 4.

Claim 8 (previously presented): A vector according to claim 7 which is an expression vector wherein the nucleic acid molecule is operably linked to one or more control sequences allowing the expression of said nucleic acid molecule in a prokaryotic host cell.

Claim 9 (previously presented): A vector according to claim 7 which is an expression vector wherein the nucleic acid molecule is operably linked to one or more control sequences allowing the expression of said nucleic acid molecule in a eukaryotic host cell.

Claim 10 (previously presented): A host cell comprising a nucleic acid molecule according to claim 3 or 4.

Claim 11 (original): A host cell comprising a vector according to claim 7.

Claim 12 (original): A host cell comprising a vector according to claim 8.

Claim 13 (original): A host cell comprising a vector according to claim 9.

Claim 14 (original): The host cell of claim 10, wherein the host cell is a bacterial, insect, fungal, plant or animal cell.

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Claim 15 (original): The host cell of claim 11, wherein the host cell is a bacterial, insect, fungal, plant or animal cell.

Claim 16 (original): The host cell of claim 12, wherein the host cell is a bacterial cell.

Claim 17 (original): The host cell of claim 13, wherein the host cell is an insect, fungal, plant, or animal cell.

Claim 18 (withdrawn): An isolated polypeptide encoded by a nucleic acid of claim 3 or 4, or a homologue or a derivative thereof, or an immunologically active or a functional fragment thereof.

Claim 19 (withdrawn): The polypeptide of claim 18 comprising an amino acid sequence as set forth in any of SEQ ID NOs: 4, 6, 10 or 35, or a homologue or a derivative thereof, or an immunologically active or a functional fragment thereof.

Claim 20 (withdrawn): A method for producing a polypeptide having cytokinin oxidase activity comprising culturing a host cell of claim 11 under conditions allowing the expression of the polypeptide and recovering the produced polypeptide from the culture.

Claim 21 (withdrawn): A method for producing a polypeptide having cytokinin oxidase activity comprising culturing a host cell of claim 12 under conditions allowing the expression of the polypeptide and recovering the produced polypeptide from the culture.

Claim 22 (withdrawn): A method for producing a polypeptide having cytokinin oxidase activity comprising culturing a host cell of claim 13 under conditions allowing the expression of the polypeptide and recovering the produced polypeptide from the culture.

Claim 23 (withdrawn): An antibody specifically recognizing a polypeptide of claim 18 or a specific epitope thereof.

Claim 24 (withdrawn): An antibody specifically recognizing a polypeptide of claim 19 or a specific epitope thereof

Claim 25 (Previously Presented): A method for the production of a transgenic plant, plant cell or plant tissue comprising the introduction therein of a nucleic acid molecule of claim 3 or 4 in an expressible format or vector.

Claim 26 (Withdrawn): A method for the production of an altered plant, plant cell or plant tissue comprising the introduction of a polypeptide of claim 18 directly into a cell, tissue or organ of said plant.

Claim 27 (Withdrawn): A method for the production of an altered plant, plant cell or plant tissue comprising the introduction of a polypeptide of claim 19 directly into a cell, tissue or organ of said plant.

Claim 28 (Previously Presented): A method for effecting the expression of a polypeptide encoded by the nucleic acid molecule of claim 3 or 4, or a homologue, derivative, or an immunologically active fragment thereof, said method comprising the stable introduction into the genome of a plant cell, a nucleic acid molecule encoding said polypeptide operably linked to one or more control sequences or a vector comprising a nucleic acid molecule encoding said polypeptide operably linked to one or more control sequences.

Claim 29 (Previously Presented): A method for effecting the expression of a polypeptide comprising the amino acid sequence as set forth in SEQ ID NO:4, or a homologue, derivative, or immunologically active fragment thereof, said method comprising the stable introduction into the genome of a plant cell, a nucleic acid molecule of claim 3 or 4 encoding said polypeptide operably linked to one or more control sequences or a vector comprising a nucleic acid molecule encoding said polypeptide operably linked to one or more control sequences.

Claim 30 (Original): The method of claim 25 further comprising regenerating a plant from said plant cell.

Claim 31 (Original): The method of claim 28 further comprising regenerating a plant from said plant cell.

Claim 32 (Original): The method of claim 29 further comprising regenerating a plant from said plant cell.

Claim 33 (Previously Presented): A transgenic plant cell comprising a nucleic acid molecule of claim 3 or 4 which is operably linked to regulatory elements allowing transcription and/or expression of said nucleic acid molecule in plant cells or a transgenic plant cell.

Claim 34 Previously Presented): The transgenic plant cell of claim 33 wherein said nucleic acid molecule is stably integrated into the genome of said plant cell.

Claim 35 (Original): A transgenic plant, plant part, or plant tissue comprising plant cells of claim 33.

Claim 36 (Original): A transgenic plant, plant part, or plant tissue comprising plant cells of claim 34.

Claim 37 (Previously Presented): A harvestable part of a plant of claim 35 wherein the harvestable part comprises the nucleic acid molecule which was introduced into the transgenic plant.

Claim 38 (Previously Presented): A harvestable part of a plant of claim 36 wherein the harvestable part comprises the nucleic acid molecule which was introduced into the transgenic plant.

Claim 39 (Original): The harvestable part of a plant of claim 37 which is selected from the group consisting of seeds, leaves, fruits, stem cultures, rhizomes, roots, tubers and bulbs.

Claim 40 (Original): The harvestable part of a plant of claim 38 which is selected from the group consisting of seeds, leaves, fruits, stem cultures, rhizomes, roots, tubers and bulbs.

Claim 41 (Previously Presented): Progeny derived from the plant or plant part of claim 35 wherein the progeny comprises the nucleic acid molecule which was introduced into the transgenic plant.

Claim 42 (Previously Presented): Progeny derived from the plant or plant part of claim 36 wherein the progeny comprises the nucleic acid molecule which was introduced into the transgenic plant.

Claim 43 (Previously Presented): A method for stimulating root growth, said method comprising expression of a nucleic acid molecule of claim 3 or 4.

Claim 44 (Previously Presented): A method for enhancing the formation of lateral or adventitious roots, said method comprising expression of a nucleic acid molecule of claim 3 or 4.

Claim 45 (Withdrawn): A method for altering root geotropism comprising altering the expression of a nucleic acid of claim 3 or 4 or comprising expression of another protein that reduces the level of active cytokinins in plants or plant parts.

Claim 46 (Original): The method of claim 43 wherein said method leads to an increase in yield.

Claim 47 (Original): The method of claim 44 wherein said method leads to an increase in yield.

Claim 48. (Withdrawn): The method of claim 45 wherein said method leads to an increase in yield.

Claim 49 (Previously Presented): The method of claim 43 wherein said expression of said nucleic acid molecule occurs under the control of a strong constitutive promoter.

Claim 50 (Previously Presented): The method of claim 44 wherein said expression of said nucleic acid molecule occurs under the control of a strong constitutive promoter.

Claim 51 (Withdrawn): The method of claim 45 wherein said expression of said nucleic acid occurs under the control of a strong constitutive promoter.

Claim 52 (Previously Presented): The method of claim 43 wherein said expression of said nucleic acid molecule occurs under the control of a promoter that is preferentially expressed in roots.

Claim 53 (Previously Presented): The method of claim 44 wherein said expression of said nucleic acid molecule occurs under the control of a promoter that is preferentially expressed in roots.

Claim 54 (Withdrawn): The method of claim 45 wherein said expression of said nucleic acid occurs under the control of a promoter that is preferentially expressed in roots.

Claim 55 (Withdrawn): A method for identifying and obtaining proteins interacting with a polypeptide of claim 18 comprising a screening assay wherein a polypeptide of claim 18 is used.

Claim 56 (Withdrawn): A method for identifying and obtaining proteins interacting with a polypeptide of claim 19 comprising a screening assay wherein a polypeptide of claim 19 is used

Claim 57 (Withdrawn): The method of claim 55 comprising a two-hybrid screening assay wherein a polypeptide of claim 18 as a bait and a cDNA library as prey are used.

Claim 58 (Withdrawn): The method of claim 56 a comprising a two-hybrid screening assay wherein a polypeptide of claim 19 as a bait and a cDNA library as prey are used

Claim 59 (Withdrawn): A method for modulating the interaction between a polypeptide of claim 18 and interacting protein partners obtainable by a screening assay wherein said polypeptide is used.

Claim 60 (Withdrawn): A method for modulating the interaction between a polypeptide of claim 19 and interacting protein partners obtainable by a screening assay wherein said polypeptide is used.

Claim 61 (Withdrawn): A method for identifying and obtaining compounds interacting with a polypeptide of claim 18 comprising the steps of:

- a) providing a two-hybrid system wherein a polypeptide of claim 18 and an interacting protein partner obtainable by a method according to claim 55 are expressed,
- b) interacting said compound with the complex formed by the expressed polypeptides as defined in (a), and,
- c) performing measurement of interaction of said compound with said polypeptide or the complex formed by the expressed polypeptides as defined in (a).

Claim 62 (Withdrawn): A method for identifying and obtaining compounds interacting with a polypeptide of claim 19 comprising the steps of:

- a) providing a two-hybrid system wherein a polypeptide of claim 19 and an interacting protein partner obtainable by a method according to claim 56 are expressed,
- b) interacting said compound with the complex formed by the expressed polypeptides as defined in (a), and,
- c) performing measurement of interaction of said compound with said polypeptide or the complex formed by the expressed polypeptides as defined in (a)

Claim 63 (Withdrawn): A method for identifying compounds or mixtures of compounds which specifically bind to a polypeptide of claim 18 comprising:

- a) combining a polypeptide of claim 18 with said compound or mixtures of compounds under conditions suitable to allow complex formation, and,
- b) detecting complex formation, wherein the presence of a complex identifies a compound or mixture which specifically binds said polypeptide.

Claim 64 (Withdrawn): A method for identifying compounds or mixtures of compounds which specifically bind to a polypeptide of claim 19 comprising:

- a) combining a polypeptide of claim 19 with said compound or mixtures of compounds under conditions suitable to allow complex formation, and,
- b) detecting complex formation, wherein the presence of a complex identifies a compound or mixture which specifically binds said polypeptide.

Claim 65 (Withdrawn): The method of claim 61 wherein said compound inhibits the activity of said polypeptide and can be used for the rational design of chemicals.

Claim 66 (Withdrawn): The method of claim 62 wherein said compound inhibits the activity of said polypeptide and can be used for the rational design of chemicals.

Claim 67 (Withdrawn): The method of claim 63 wherein said compound or mixture of compounds inhibits the activity of said polypeptide and can be used for the rational design of chemicals.

Claim 68 (Withdrawn): The method of claim 64 wherein said compound or mixture of compounds inhibits the activity of said polypeptide and can be used for the rational design of chemicals.

Claim 69 (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 55 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

Claim 70 (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 56 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

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Claim 71 (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 57 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

Claim 72 (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 58 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

Claim 73 (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 59 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

Claim 74. (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 60 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

Claim 75 (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 61 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

Claim 76 (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 62 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

Claim 77 (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 63 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

Claim 78 (Withdrawn): A method for production of a plant growth regulator or herbicide composition comprising the steps of the method of claim 64 and formulating the compounds obtained from said steps in a suitable form for the application in agriculture or plant cell or tissue culture.

Claim 79 (Previously Presented): A composition comprising a nucleic acid molecule of claims 3 or 4.

Claim 80 (Previously Presented): A composition comprising the vector of claim 7.

Claim 81 (Previously Presented): A composition comprising the vector of claim 8.

Claim 82 (Withdrawn): A diagnostic composition comprising the polypeptide of claim 18.

Claim 83 (Withdrawn): A diagnostic composition comprising the polypeptide of claim 19.

Claim 84 (Withdrawn): A diagnostic composition comprising the antibody of claim 23.

Claim 85 (Withdrawn): A diagnostic composition comprising the antibody of claim 24.

Claim 86 (Previously Presented): A method for increasing the size of the root meristem comprising expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in plants or plant parts, preferably in roots.

Claim 87 (Previously Presented): A method for increasing root size comprising expression of a nucleic acid molecule of claim 3 or 4, or a nucleic acid molecule as defined in claim 2 in plants or plant parts, preferably in roots.

Claim 88 (Withdrawn): A method for increasing the size of the shoot meristem comprising downregulation of expression of a nucleic acid of claim 3 or 4, or a nucleic acid as defined in claim 2, preferably in shoots.

Claim 89 (Withdrawn): A method for delaying leaf senescence comprising downregulation of expression of a nucleic acid of claim 3 or 4 or a nucleic acid as defined in claim 2, preferably in senescing leaves.

Claim 90 (Previously Presented): A method for altering leaf senescence comprising expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid as defined in claim 2 in senescing leaves.

Claim 91 (Previously Presented) A method for increasing leaf thickness comprising expression of a nucleic acid molecule of claim 3 or 4, or a nucleic acid molecule as defined in claim 2 in plants or plant parts.

Claim 92 (Previously Presented): A method for reducing vessel size comprising expression of a nucleic acid molecule of claim 3 or 4, or a nucleic acid as defined in claim 2 in plants or plant parts.

Claim 93 (Withdrawn): A method for increasing vessel size comprising downregulation of expression of a nucleic acid of claim 3 or 4, or a nucleic acid as defined in claim 2, in plants or plant parts.

Claim 94 (Withdrawn): A method for inducing parthenocarpy comprising expression of a nucleic acid of claim 3 or 4 or a nucleic acid as defined in claim 2 or comprising expression of a nucleic acid encoding a protein that reduces the level of active cytokinins in plants or plant parts, preferably in the placenta, ovules and tissues derived therefrom.

Claim 95 (Previously Presented): A method for improving standability of seedlings comprising expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 preferably in the roots of seedlings.

Claim 96 (Previously Presented): A method for increasing branching said method\_comprising expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in plants or plant parts.

Claim 97. (Previously Presented): A method for improving lodging resistance said method comprising expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in plants or plant parts, preferably in stems or axillary buds.

Claim 98 (Previously Presented): A transgenic plant comprising a transgenic rootstock wherein the transgenic rootstock comprises the nucleic acid molecule of claims 3 or 4 or a nucleic acid molecule as defined in claim 2.

Claim 99 (Original): The transgenic plant of claim 98 further comprising a scion.

Claim 100 (Original): A harvestable part of a plant of claim 98 or 99.

Claim 101 (Previously Presented): A method for stimulating root growth and development, said method comprising expression of a nucleic acid molecule of claim 3 or 4 in a transgenic plant cell or tissue culture.

Claim 102 (Withdrawn): A method according to claim 61 wherein said nucleic acid is at least one of the nucleic acids of claim 3 or as defined in claim 2.

Claim 103 (Previously Presented): A method of increasing seed size or weight which comprises expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in a plant or plant part, preferably seeds.

Claim 104 (Previously Presented): A method of increasing embryo size or weight which comprises expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in a plant or plant part, preferably embryos.

Claim 105 (Previously Presented): A method of increasing cotyledon size said method comprising expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in a plant or plant part, preferably cotyledons.

Claim 106 (Previously Presented): A method for increasing seed size or weight which comprises expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in a plant or plant part, preferably seeds.

Claim 107 (Previously Presented): A method for increasing embryo size or weight which comprises expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in a plant or plant part, preferably embryos.

Claim 108 (Previously Presented): A method for increasing cotyledon size which comprises expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in a plant or plant part, preferably cotyledons.

Claim 109 (Previously Presented): The method of claim 106 wherein the nucleic acid molecule is under control of a promoter that controls expression preferentially in seeds.

Claim 110 (Previously Presented): The method of claim 107 wherein the nucleic acid molecule is under the control of a promoter that controls expression preferentially in embryos.

Claim 111 (Previously Presented): The method of claim 108 wherein the nucleic acid molecule is under the control of a promoter that controls expression preferentially in cotyledons.

Claim 112 (Original): The method of claim 109 wherein the promoter is further specific to the endosperm or aleurone.

Claim 113 (Original): The method of claim 106 wherein said method leads to an increase in yield.

Claim 114 (Original): The method of claim 106 wherein said method leads to an increase in growth of seedlings or an increase in early vigor.

Claim 115 (Original): The method of claim 107 wherein said method leads to an increase in yield.

Claim 116 (Original): The method of claim 107 wherein said method leads to an increase in growth of seedlings or an increase in early vigor.

Claim 117 (Original): The method of claim 108 wherein said method leads to an increase in yield.

Claim 118 (Original): The method of claim 108 wherein said method leads to an increase in growth of seedlings or an increase in early vigor.

Claim 119 (Original): The method of claim 114 wherein the increase in growth of seedlings or early vigor is associated with increased stress tolerance.

Claim 120 (Original): The method of claim 116 wherein the increase in growth of seedlings or early vigor is associated with increased stress tolerance.

Claim 121 (Original): The method of claim 118 wherein the increase in growth of seedlings or early vigor is associated with increased stress tolerance.

Claim 122 (Withdrawn): A method for increasing seed size or weight in a plant which comprises expression of a nucleic acid as set forth in any of SEQ ID NOs:1, 5, 25, or 27 or an ortholog of said nucleic acid, wherein said ortholog is specific to the species of the plant.

Claim 123 (Withdrawn): A method for increasing embryo size or weight in a plant which comprises expression of a nucleic acid as set forth in any of SEQ ID NOs:1, 5, 25, or 27 or an ortholog of said nucleic acid, wherein said ortholog is specific to the species of the plant.

Claim 124 (Withdrawn: A method for increasing cotyledon size in a plant which comprises expression of a nucleic acid as set forth in any of SEQ ID NOs:1, 5, 25, or 27 or an ortholog of said nucleic acid, wherein said ortholog is specific to the species of the plant.

Claim 125 (Withdrawn): The method of claim 122 wherein the nucleic acid is under control of a promoter that controls expression preferentially in seeds.

Claim 126 (Withdrawn): The method of claim 123 wherein the nucleic acid is under the control of a promoter that controls expression preferentially in embryos.

Claim 127 (Withdrawn): The method of claim 124 wherein the nucleic acid is under the control of a promoter that controls expression preferentially in cotyledons.

Claim 128 (Withdrawn): The method of claim 125 wherein the promoter is further specific to the endosperm or aleurone.

Claim 129 (Withdrawn): The method of claim 122 wherein said method leads to an increase in yield.

Claim 130 (Withdrawn): The method of claim 122 wherein said method leads to an increase in growth of seedlings or an increase in early vigor.

Claim 131 (Withdrawn): The method of claim 123 wherein said method leads to an increase in yield.

Claim 132 (Withdrawn): The method of claim 123 wherein said method leads to an increase in growth of seedlings or an increase in early vigor.

Claim 133 (Withdrawn): The method of claim 124 wherein said method leads to an increase in yield.

Claim 134 (Withdrawn): The method of claim 124 wherein said method leads to an increase in growth of seedlings or an increase in early vigor.

Claim 135 (Withdrawn): The method of claim 130 wherein the increase in growth of seedlings or early vigor is associated with increased stress tolerance.

Claim 136 (Withdrawn): The method of claim 132 wherein the increase in growth of seedlings or early vigor is associated with increased stress tolerance.

Claim 137 (Withdrawn): The method of claim 134 wherein the increase in growth of seedlings or early vigor is associated with increased stress tolerance.

Claim 138 (Previously Presented): A method for delaying onset to flowering in a plant, said method comprising expression of a nucleic acid molecule of claim 3 or 4 or a nucleic acid molecule as defined in claim 2 in the plant.